

The diagram illustrates a two-cavity system for third-harmonic generation (THG). The left cavity consists of a top mirror labeled $-K$ and a bottom mirror. A red wavy line labeled "input" enters from the left. The right cavity consists of a top mirror labeled $+K$ and a bottom mirror. A blue wavy line labeled "THG output" exits to the right at an angle θ . Red arrows show the input field's path, and blue arrows show the THG output field's path. A dashed horizontal line is present between the two cavities.

The diagram illustrates the effect of a vertical mirror and a C_2 rotation on a molecular structure. On the left, a vertical mirror (labeled "vertical mirror") reflects a molecule with three yellow spheres, each containing a red downward arrow. The reflection shows the same three spheres, but the middle one is now a faded purple color and the arrows are also faded. On the right, a C_2 rotation (labeled " C_2 rotation") is shown. The molecule is rotated 180 degrees around a vertical axis, resulting in a new configuration where the top two spheres have black upward arrows and the bottom sphere has a black upward arrow. The original configuration is shown in a faded state to indicate the transformation.